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August 29, 2019

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29211

**RE: Duke Energy Carolinas, LLC – Monthly Fuel Cost Report and Base Load
Power Plant Performance Report
Docket No. 1989-9-E**

Dear Ms. Boyd:

Pursuant to the Commission's Orders in the above captioned docket, enclosed please find the following reports for the month of July 2019.

1. Monthly Fuel Cost Report for July 2019 (Exhibit A).
2. Base Load Power Plant Performance Report for July 2019 (Exhibit B).

Also enclosed are the revised Schedules 2 and 4 for the month of June 2019. The Schedules have been revised to correct the natural gas consumed and natural gas capacity costs, the base fuel non-capacity cost (over)/under recovery costs, and the base fuel capacity (over)/under recovery costs for the period.

Should you have any questions regarding this matter, please do not hesitate to contact me.

Sincerely,

Rebecca J. Dulin

Enclosures

cc: Ms. Dawn Hipp, Office Regulatory Staff
Mr. Scott Elliott, Elliott & Elliott, P.A.
Ms. Nanette Edwards, Office Regulatory Staff
Mr. Jeff Nelson, Office Regulatory Staff
Mr. Michael Seaman-Huynh, Office of Regulatory Staff
Ms. Heather Shirley Smith, Duke Energy

DUKE ENERGY CAROLINAS
SUMMARY OF MONTHLY FUEL REPORT

Line No.	July 2019
1 Fuel and Fuel-related Costs excluding DERP incremental costs	\$ 185,441,411
MWH sales:	
2 Total system sales.	8,444,590
3 Less intersystem sales	139,370
4 Total sales less intersystem sales	8,305,220
5 Total fuel and fuel-related costs (¢/KWH) (line 1/line 4)	2.2328
6 Current fuel and fuel-related cost component (¢/KWH) (per Schedule 4, Line 2 + Line 10 + Line 18)	2.0927
Generation Mix (MWH):	
Fossil (by primary fuel type):	
7 Coal	2,973,566
8 Fuel Oil	6,584
9 Natural Gas - Combined Cycle	1,486,147
10 Natural Gas - Combustion Turbine	90,596
11 Natural Gas - Steam	76,542
12 Biogas	-
13 Total fossil	4,633,435
14 Nuclear 100%	5,358,956
15 Hydro - Conventional	126,587
16 Hydro - Pumped storage	(63,119)
17 Total hydro	63,468
18 Solar Distributed Generation	15,529
19 Total MWH generation	10,071,388
20 Less joint owners' portion - Nuclear	1,377,750
21 Less joint owners' portion - Combined Cycle	73,246
22 Adjusted total MWH generation	8,620,392

Note: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
DETAILS OF FUEL AND FUEL-RELATED COSTS

Fuel and fuel-related costs:	July 2019
Steam Generation - Account 501	
0501110 coal consumed - steam	\$ 99,945,976
0501310 fuel oil consumed - steam	561,465
0501330 fuel oil light-off - steam	370,868
Total Steam Generation - Account 501	<u>100,878,309</u>
Nuclear Generation - Account 518	
0518100 burnup of owned fuel	23,871,078
Other Generation - Account 547	
0547100, 0547124 natural gas consumed - Combustion Turbine	2,424,446
0547100, 0547124 natural gas capacity - Combustion Turbine	641,030
0547100 natural gas consumed - Steam	2,553,167
0547101 natural gas consumed - Combined Cycle	26,464,311
0547101 natural gas capacity - Combined Cycle	3,247,266
0547106 biogas consumed - Combined Cycle	-
0547200 fuel oil consumed - Combustion Turbine	112,710
Total Other Generation - Account 547	<u>35,442,930</u>
Purchased Power and Net Interchange - Account 555	
Fuel and fuel-related component of purchased power	19,575,855
Fuel and fuel-related component of DERP purchases	22,327
PURPA purchased power capacity	6,660,685
DERP purchased power capacity	3,177
Total Purchased Power and Net Interchange - Account 555	<u>26,262,044</u>
Less:	
Fuel and fuel-related costs recovered through intersystem sales	3,823,203
Fuel in loss compensation	111,653
Solar Integration Charge	1,199
Total Fuel Credits - Account 447/456	<u>3,936,055</u>
Environmental Costs	
0509000, 0557451 emission allowance expense	140
0502020, 0502030, 0502040, 0502082, 0548020 reagent expense	2,718,476
0502080, 0502083, 0502090, 0502150 sorbent expense	255,985
Emission allowance gains	-
Less reagents expense recovered through intersystem sales - Account 447	35,599
Less emissions expense recovered through intersystem sales - Account 447	15,897
Total Environmental Component of Recovery	<u>2,923,105</u>
Total Fuel and Fuel-related Costs excluding DERP incremental costs	<u>\$ 185,441,411</u>
DERP incremental costs	508,292
Total Fuel and Fuel-related Costs to be Recovered	<u>\$ 185,949,703</u>

Notes: Detail amounts may not add to totals shown due to rounding.
Report reflects net ownership costs of jointly owned facilities.

**DUKE ENERGY CAROLINAS
PURCHASED POWER AND INTERCHANGE
SOUTH CAROLINA**

July 2019

Purchased Power	Total	Capacity	Non-capacity		
Marketers, Utilities, Other	\$	\$	mWh	Fuel \$	Non-fuel \$
Blue Ridge Electric Membership Corp.	\$ 1,103,156	\$ 673,714	24,951	\$ 429,442	-
EDF Trading North America, LLC.	1,400	-	50	1,400	-
Haywood Electric	367,396	180,998	7,274	186,398	-
Macquarie Energy, LLC	23,100	-	700	23,100	-
NCEMC	4,657	4,657	-	-	-
NCMPA	956,203	-	45,745	956,203	-
Piedmont Electric Membership Corp.	514,624	307,899	11,904	206,725	-
Piedmont Municipal Power Agency	53,126	-	2,894	53,126	-
PJM Interconnection, LLC.	(917)	-	-	(917)	-
Southern Company Services, Inc.	67,580	-	6,758	67,580	-
Town of Dallas	584	584	-	-	-
Town of Forest City	19,856	19,856	-	-	-
DE Progress - Native Load Transfer	7,422,285	-	358,479	7,344,762	\$ 77,523
DE Progress - Native Load Transfer Benefit	331,423	-	-	331,423	-
Generation Imbalance	(490,144)	-	3,563	90,851	(580,995)
Energy Imbalance - Purchases	164,303	-	5,228	52,186	112,117
Energy Imbalance - Sales	(45,364)	-	-	(43,256)	(2,108)
	\$ 10,493,268	\$ 1,187,708	467,546	\$ 9,699,023	\$ (393,463)
Act 236 PURPA Purchases					
Cherokee County Cogeneration Partners	\$ 5,046,433	\$ 3,200,490	64,077	\$ 1,845,943	\$
Renewable Energy	7,501,976	2,308,343	100,495	5,193,633	
DERP	33,207	3,177	558	22,327	7,703
Other Qualifying Facilities	3,922,036	1,151,852	56,986	2,660,982	109,202
	\$ 16,503,652	\$ 6,663,862	222,116	\$ 9,722,885	\$ 116,905
Other Purchases	\$ 780	\$ -	22	\$ -	\$ 780
Total Purchased Power	\$ 26,997,700	\$ 7,851,570	689,684	\$ 19,421,908	\$ (275,778)
<u>Interchanges In</u>					
Other Catawba Joint Owners	7,433,721	-	697,819	4,491,860	2,941,861
WS Lee Joint Owner	1,109,768	-	42,721	933,906	175,862
Total Interchanges In	8,543,489	-	740,540	5,425,766	3,117,723
<u>Interchanges Out</u>					
Other Catawba Joint Owners	(7,316,841)	(134,209)	(680,097)	(4,382,548)	(2,800,084)
Catawba- Net Negative Generation	-	-	-	-	-
WS Lee Joint Owner	(1,044,684)	-	(38,982)	(866,944)	(177,740)
Total Interchanges Out	(8,361,525)	(134,209)	(719,079)	(5,249,492)	(2,977,824)
Net Purchases and Interchange Power	\$ 27,179,664	\$ 7,717,361	711,145	\$ 19,598,182	\$ (135,879)

NOTE: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
INTERSYSTEM SALES*
SOUTH CAROLINA

JULY 2019

	Total	Capacity	Non-capacity		
Sales	\$	\$	mWh	Fuel \$	Non-fuel \$
Utilities:					
SC Public Service Authority - Emergency	\$ 11,948	-	400	\$ 10,440	\$ 1,508
SC Electric & Gas - Emergency	87,257	-	2,928	81,015	6,242
Market Based:					
Central Electric Power Cooperative, Inc.	458,000	\$ 458,000	-	-	-
Exelon Generation Company, LLC.	27,020	-	688	18,373	8,647
Macquarie Energy, LLC	360,000	-	9,400	256,188	103,812
NCMPA	104,290	87,500	564	17,994	(1,204)
PJM Interconnection, LLC.	376,761	-	9,185	281,859	94,902
The Energy Authority	79,220	-	1,805	47,062	32,158
Westar Energy, Inc.	29,400	-	600	21,733	7,667
Other:					
DE Progress - Native Load Transfer Benefit	377,699	-	-	377,699	-
DE Progress - Native Load Transfer	2,657,797	-	111,249	2,523,006	134,791
Generation Imbalance	298,049	-	2,551	239,330	58,719
BPM Transmission	(102,674)	-			(102,674)
Total Intersystem Sales	\$ 4,764,767	\$ 545,500	139,370	\$ 3,874,699	\$ 344,568

* Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
July 2019

Line No.		Residential	Commercial	Industrial	Total
1	Actual System kWh sales				8,305,219,975
2	DERP Net Metered kWh generation				11,040,529
3	Adjusted System kWh sales				8,316,260,504
4	Actual S.C. Retail kWh sales	683,050,986	558,598,058	764,818,754	2,006,467,798
5	DERP Net Metered kWh generation	6,812,153	2,407,600	1,820,776	11,040,529
6	Adjusted S.C. Retail kWh sales	689,863,139	561,005,658	766,639,530	2,017,508,327
Base fuel component of recovery: non-capacity					
7	Incurred System base fuel - non-capacity expense				\$171,943,821
8	Eliminate avoided fuel benefit of S.C. net metering				358,741
9	Adjusted Incurred System base fuel - non-capacity expense				\$172,302,562
10	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)				2.0719
11	S.C. Retail portion of adjusted incurred system expense	\$14,293,105	\$11,623,339	\$15,883,816	\$41,800,260
12	Assign 100 % of Avoided Fuel Benefit of S.C net metering	(183,855)	(85,743)	(89,142)	(358,741)
13	S.C. Retail portion of incurred system expense	\$14,109,250	\$11,537,596	\$15,794,674	\$41,441,519
14	Billed base fuel - non-capacity rate (¢/kWh)	1.9648	1.9648	1.9648	1.9648
15	Billed base fuel - non-capacity revenue	\$13,420,586	\$10,975,335	\$15,027,159	\$39,423,080
16	DERP NEM incentive - fuel component	(78,273)	(36,504)	(37,951)	(152,728)
17	Adjusted S.C. billed base fuel - non-capacity revenue	\$13,342,313	\$10,938,831	\$14,989,208	\$39,270,352
18	S.C. base fuel - non-capacity (over)/under recovery [See footnote]	\$766,937	\$598,765	\$805,466	\$2,171,168
19	Adjustment	-	-	-	-
20	Total S.C. base fuel - non-capacity (over)/under recovery [See footnote]	\$766,937	\$598,765	\$805,466	\$2,171,168
Base fuel component of recovery: capacity					
21	Incurred base fuel - capacity rates by class (¢/kWh)	0.1912	0.1090	0.0828	0.1270
22	Incurred S.C. base fuel - capacity expense	\$1,306,130	\$609,131	\$633,279	\$2,548,540
23	Billed base fuel - capacity rates by class (¢/kWh)	0.1274	0.1158	0.0901	0.1100
24	Billed S.C. base fuel - capacity revenue	870,207	646,857	689,102	2,206,166
25	S.C. base fuel - capacity (over)/under recovery [See footnote]	435,923	(37,726)	(55,823)	342,374
26	Adjustment	-	-	-	-
27	Total S.C. base fuel - capacity (over)/under recovery [See footnote]	\$435,923	(\$37,726)	(\$55,823)	\$342,374
Environmental component of recovery					
28	Incurred environmental rates by class (¢/kWh)	0.0530	0.0302	0.0229	0.0352
29	Incurred S.C. environmental expense	\$361,926	\$168,789	\$175,481	\$706,196
30	Billed environmental rates by class (¢/kWh)	0.0166	0.0193	0.0168	0.0174
31	Billed S.C. environmental revenue	113,386	107,809	128,490	349,685
32	S.C. environmental (over)/under recovery [See footnote]	248,540	60,980	46,991	356,511
33	Adjustment	-	-	-	-
34	Total S.C. environmental (over)/under recovery [See footnote]	\$248,540	\$60,980	\$46,991	\$356,511

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
July 2019

Line No.		Residential	Commercial	Industrial	Total	
Distributed Energy Resource Program component of recovery: avoided costs						
35	Incurring S.C. DERP avoided cost rates by class (¢/kWh)	Input	0.0005	0.0003	0.0002	0.0003
36	Incurring S.C. DERP avoided cost expense	L4 * L35 / 100	\$3,158	\$1,473	\$1,531	\$6,162
37	Billed S.C. DERP avoided cost rates by class (¢/kWh)	Input	0.0006	0.0005	0.0004	0.0005
38	Billed S.C. DERP avoided cost revenue	L4 * L37 / 100	4,098	2,793	3,059	9,950
39	S.C. DERP avoided cost (over)/under recovery [See footnote]	L38 - L36	(940)	(1,320)	(1,528)	(3,788)
40	Adjustment	Input	-	-	-	-
41	Total S.C. DERP avoided cost (over)/under recovery [See footnote]	L39 + L40	(\$940)	(\$1,320)	(\$1,528)	(\$3,788)
Distributed Energy Resource Program component of recovery: incremental costs						
42	Incurring S.C. DERP incremental expense	Input	\$259,661	\$121,096	\$125,897	\$506,654
43	Billed S.C. DERP incremental rates (\$/account)	Input	\$0.89	\$4.28	\$99.56	
44	Billed S.C. DERP incremental revenue	Input	453,678	334,999	156,196	944,873
45	S.C. DERP incremental (over)/under recovery [See footnote]	L44 - L42	(194,017)	(213,903)	(30,299)	(438,219)
46	Adjustment	Input	-	-	-	-
47	Total S.C. DERP incremental (over)/under recovery [See footnote]	L45 + L46	(\$194,017)	(\$213,903)	(\$30,299)	(\$438,219)
48	Total S.C. Retail (over)/under recovery [See footnote]	L20 + L27 + L34 + L41 + L47	1,256,443	406,796	764,807	2,428,046

Year 2018-2019

Cumulative (over) / under recovery - BASE FUEL NON-CAPACITY

_1	Balance ending May 2018	\$64,562,410				
	June 2018 - actual	68,657,779	1,313,984	1,104,598	1,676,787	4,095,369
	July 2018 - actual	74,109,473	1,918,193	1,509,942	2,023,559	5,451,694
	August 2018 - actual	79,557,480	1,778,046	1,439,863	2,230,098	5,448,007
	September 2018 - actual	78,314,056	(314,858)	(317,868)	(610,698)	(1,243,424)
_2, _3	October 2018 - actual	82,454,493	1,429,090	1,306,714	1,404,633	4,140,437
_2	November 2018 - actual	84,389,411	569,756	493,825	871,337	1,934,918
	December 2018 - actual	88,123,264	1,360,141	913,578	1,460,134	3,733,853
_3	January 2019 - actual	88,266,730	74,036	35,086	34,344	143,466
	February 2019 - actual	93,039,011	1,645,342	1,177,747	1,949,192	4,772,281
	March 2019 - actual	91,131,763	(565,660)	(496,983)	(844,605)	(1,907,248)
	April 2019 - actual	87,146,255	(1,034,478)	(1,048,872)	(1,902,158)	(3,985,508)
	May 2019 - actual	87,176,757	34,404	6,547	(10,449)	30,502
	June 2019 - actual	83,215,417	(1,219,800)	(1,055,550)	(1,685,990)	(3,961,340)
	July 2019 actual	85,386,585	766,937	598,765	805,466	2,171,168

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
July 2019

Line No.

Year 2018-2019

Cumulative (over) / under recovery - BASE FUEL CAPACITY

	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Beginning Balance	(910,631)				
June 2018 - actual	(1,231,472)	(168,835)	(109,798)	(42,208)	(320,841)
July 2018 - actual	(705,685)	97,201	127,214	301,372	525,787
August 2018 - actual	(167,087)	148,770	144,110	245,718	538,598
September 2018 - actual	(447,925)	(122,234)	(59,118)	(99,486)	(280,838)
_/2, _/3 October 2018 - actual	(768,992)	(155,607)	(165,705)	245	(321,067)
_/2 November 2018 - actual	(1,316,322)	(92,070)	(155,477)	(299,783)	(547,330)
December 2018 - actual	(2,417,453)	(465,350)	(270,393)	(365,388)	(1,101,131)
January 2019 - actual	(3,301,777)	(276,593)	(266,449)	(341,282)	(884,324)
February 2019 - actual	(4,252,925)	(255,719)	(273,449)	(421,980)	(951,148)
March 2019 - actual	(5,223,777)	(242,726)	(298,361)	(429,765)	(970,852)
April 2019 - actual	(5,894,084)	(11,486)	(238,213)	(420,608)	(670,307)
May 2019 - actual	(6,283,595)	146,654	(199,901)	(336,264)	(389,511)
June 2019 - actual	(6,766,248)	46,028	(204,425)	(324,256)	(482,653)
July 2019 actual	(6,423,874)	435,923	(37,726)	(55,823)	342,374

Year 2018-2019

Cumulative (over) / under recovery - ENVIRONMENTAL

	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Beginning Balance	(1,461,871)				
June 2018 - actual	(1,205,987)	146,842	32,175	76,867	255,884
July 2018 - actual	(1,154,405)	48,770	(30,136)	32,948	51,582
August 2018 - actual	(1,205,110)	23,971	(50,943)	(23,733)	(50,705)
September 2018 - actual	(1,388,163)	126	(79,741)	(103,438)	(183,053)
_/2 October 2018 - actual	(1,458,759)	(2,312)	(60,262)	(8,022)	(70,596)
_/2 November 2018 - actual	(1,348,880)	80,334	29,032	513	109,879
December 2018 - actual	(1,291,265)	38,565	18,548	502	57,615
January 2019 - actual	(1,191,028)	101,872	10,400	(12,035)	100,237
February 2019 - actual	(1,312,637)	(3,068)	(40,317)	(78,224)	(121,609)
March 2019 - actual	(1,223,735)	105,076	7,752	(23,926)	88,902
April 2019 - actual	(1,144,962)	111,893	4,409	(37,529)	78,773
May 2019 - actual	(965,535)	166,717	23,363	(10,653)	179,427
June 2019 - actual	(672,086)	219,527	52,209	21,713	293,449
July 2019 actual	(315,575)	248,540	60,980	46,991	356,511

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
July 2019

Line No.

Year 2018-2019

Cumulative (over) / under recovery - DERP AVOIDED COSTS

	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Beginning Balance	(24,303)				
June 2018 - actual	(13,251)	9,165	2,683	(796)	11,052
July 2018 - actual	(879)	10,304	2,796	(728)	12,372
August 2018 - actual	10,664	9,627	2,710	(794)	11,543
September 2018 - actual	23,085	10,480	3,062	(1,121)	12,421
_/2 October 2018 - actual	25,717	3,255	486	(1,109)	2,632
_/2 November 2018 - actual	18,004	(2,549)	(2,100)	(3,064)	(7,713)
December 2018 - actual	9,149	(3,757)	(2,216)	(2,882)	(8,855)
January 2019 - actual	237	(3,927)	(2,271)	(2,714)	(8,912)
February 2019 - actual	(4,097)	(1,327)	(1,142)	(1,865)	(4,334)
March 2019 - actual	(2,941)	1,614	65	(523)	1,156
April 2019 - actual	(614)	2,567	288	(528)	2,327
May 2019 - actual	(1,471)	990	(593)	(1,254)	(857)
June 2019 - actual	(2,092)	851	(443)	(1,029)	(621)
July 2019 actual	(5,880)	(940)	(1,320)	(1,528)	(3,788)

Year 2018-2019

Cumulative (over) / under recovery - DERP INCREMENTAL COSTS

	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Balance ending May 2018	(966,265)				
June 2018 - actual	(449,883)	289,414	95,385	131,583	516,382
July 2018 - actual	85,285	297,559	99,538	138,071	535,168
August 2018 - actual	643,476	306,707	106,165	145,319	558,191
September 2018 - actual	1,162,309	263,870	107,060	147,903	518,833
_/2 October 2018 - actual	1,458,476	111,032	26,537	158,598	296,167
_/2 November 2018 - actual	1,459,229	(86,182)	(63,094)	150,029	753
December 2018 - actual	1,471,614	(81,612)	(59,227)	153,224	12,385
January 2019 - actual	1,432,376	9,232	(115,256)	66,786	(39,238)
February 2019 - actual	1,344,867	(15,961)	(125,035)	53,487	(87,509)
March 2019 - actual	1,366,838	40,294	(99,958)	81,635	21,971
April 2019 - actual	(286,304)	(818,859)	(499,726)	(334,557)	(1,653,142)
May 2019 - actual	(474,031)	(67,487)	(150,947)	30,707	(187,727)
June 2019 - actual	(851,594)	(167,262)	(193,565)	(16,736)	(377,563)
July 2019 actual	(1,289,813)	(194,017)	(213,903)	(30,299)	(438,219)

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of over or under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts. Under collections, or regulatory assets, are shown as p

_/1 May 2018 ending balance reflects adjustments pursuant to the docket no. 2018-3-E directive. The total adjustment of \$4,655 was made to the May ending balance

_/2 Reflects a prorated rate and prorated allocation factor for periods in which the approved rates changed.

_/3 Includes prior period adjustments.

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED COST REPORT
JULY 2019

Description	Allen Steam	Belews Creek Steam	Buck CC	Catawba Nuclear	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC	Lee Steam/CT	Lincoln CT	Marshall Steam	McGuire Nuclear	Mill Creek CT	Oconee Nuclear	Rockingham CT	Current Month	Total 12 Mo July 2019
Cost of Fuel Purchased (\$)																
Coal	\$1,597,653	\$22,694,827			\$21,770,444					\$31,858,649					\$77,921,573	\$682,068,532
Oil	131,031	757,425			164,057					106,966					1,159,477	17,497,536
Gas - CC			\$9,601,261			\$9,725,641	\$11,755,488								31,082,390	372,444,736
Gas - CT								14,000	\$16,953			\$48,226		\$2,986,297	3,065,476	53,033,000
Gas - Steam					2,539,114			14,053							2,553,167	42,195,565
Biogas						23,714									23,714	2,900,899
Total	\$1,728,683	\$23,452,252	\$9,601,261		\$24,473,615	\$9,749,355	\$11,755,488	\$28,053	\$16,953	\$31,965,614		\$48,226		\$2,986,297	\$115,805,797	\$1,170,139,979
Average Cost of Fuel Purchased (¢/MBTU)																
Coal	539.74	378.87			348.11					479.37					406.14	352.89
Oil	1,424.37	1,449.04			1,456.63					1,497.11					1,451.57	906.79
Gas - CC			292.65			292.19	293.20								292.42	356.37
Gas - CT									381.23			306.99		295.97	297.87	344.25
Gas - Steam					296.22										297.86	374.25
Biogas																1,641.71
Weighted Average	566.41	388.13	292.65		343.62	292.90	293.20	INF.	381.23	480.46		306.99		295.97	364.50	358.41
Cost of Fuel Burned (\$)																
Coal	\$5,831,532	\$33,286,550			\$20,927,926					\$39,899,968					\$99,945,976	\$644,401,627
Oil - CC																
Oil - Steam/CT	105,925	607,246			104,567			112,230	\$480	114,595					1,045,043	17,177,653
Gas - CC			\$9,601,261			\$9,725,641	\$11,755,488								31,082,390	372,444,736
Gas - CT								\$14,000	16,953			\$48,226		\$2,986,297	3,065,476	53,033,000
Gas - Steam					2,539,114			14,053							2,553,167	42,195,565
Biogas						23,714									23,714	2,900,899
Nuclear				\$10,292,829							\$10,450,322		\$11,439,798		32,182,949	363,899,335
Total	\$5,937,456	\$33,893,795	\$9,601,261	\$10,292,829	\$23,571,607	\$9,749,355	\$11,755,488	\$140,283	\$17,433	\$40,014,564	\$10,450,322	\$48,226	\$11,439,798	\$2,986,297	\$169,898,715	\$1,496,052,445
Average Cost of Fuel Burned (¢/MBTU)																
Coal	368.27	328.02			339.51					381.06					352.34	341.88
Oil - CC																
Oil - Steam/CT	1,450.23	1,453.33			1,463.10			1,683.87	1,499.78	1,478.84					1,478.56	1,538.07
Gas - CC			292.65			292.19	293.20								292.42	356.37
Gas - CT									381.23			306.99		295.97	297.87	344.25
Gas - Steam					296.22										297.86	374.25
Biogas																1,641.71
Nuclear				59.04							59.52		58.47		58.99	59.04
Weighted Average	373.23	332.63	292.65	59.04	335.37	292.90	293.20	2,099.41	389.22	381.88	59.52	306.99	58.47	295.97	177.91	160.41
Average Cost of Generation (¢/kWh)																
Coal	4.42	3.06			3.19					3.64					3.36	3.29
Oil - CC																
Oil - Steam/CT	17.46	13.69			13.39				27.87	14.11					15.87	16.00
Gas - CC			2.12			2.12	2.04								2.09	1.98
Gas - CT												6.75		3.31	3.38	3.38
Gas - Steam					3.29										3.34	3.34
Biogas																1.72
Nuclear				0.60							0.60		0.60		0.60	0.60
Weighted Average	4.48	3.10	2.12	0.60	3.21	2.13	2.04			3.65	0.60	6.75	0.60	3.31	1.69	1.50

DUKE ENERGY CAROLINAS
 FUEL AND FUEL RELATED COST REPORT
 JULY 2019

Description	Allen Steam	Belews Creek Steam	Buck CC	Catawba Nuclear	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC	Lee Steam/CT	Lincoln CT	Marshall Steam	McGuire Nuclear	Mill Creek CT	Oconee Nuclear	Rockingham CT	Current Month	Total 12 Mo July 2019
Burned MBTU's																
Coal	1,583,511	10,147,721			6,164,199			-		10,470,669					28,366,100	188,480,688
Oil - CC															-	-
Oil - Steam/CT	7,304	41,783			7,147			6,665	32	7,749		-		-	70,680	1,116,632
Gas - CC			3,280,806			3,328,566	4,009,364								10,618,736	104,510,777
Gas - CT								-	4,447			15,709		1,008,985	1,029,141	15,407,696
Gas - Steam					857,167			17							857,184	11,254,285
Biogas			-				-								-	176,054
Nuclear				17,435,043							17,556,773		19,564,655		54,556,471	609,955,054
Total	1,590,815	10,189,504	3,280,806	17,435,043	7,028,513	3,328,566	4,009,364	6,682	4,479	10,478,418	17,556,773	15,709	19,564,655	1,008,985	95,498,312	930,902,747
Net Generation (mWh)																
Coal	132,054	1,088,324			656,866					1,096,322					2,973,566	19,581,931
Oil - CC															-	-
Oil - Steam/CT	607	4,436			781	-	-	(53)	2	812		-		-	6,584	109,820
Gas - CC			453,271			457,722	575,154	-							1,486,147	14,724,820
Gas - CT								(58)	(357)			714		90,297	90,596	1,354,292
Gas - Steam					77,087			(545)							76,542	1,108,710
Biogas			-				-								-	24,419
Nuclear 100%				1,706,108							1,736,020		1,916,828		5,358,956	60,376,699
Hydro (Total System)															63,468	2,469,171
Solar (Total System)															15,529	130,000
Total	132,661	1,092,760	453,271	1,706,108	734,734	457,722	575,154	(656)	(355)	1,097,134	1,736,020	714	1,916,828	90,297	10,071,388	99,880,148
Cost of Reagents Consumed (\$)																
Ammonia		\$49,844	\$15,285		\$38,372	\$10,500	\$14,781								\$128,782	\$2,553,811
Limestone	\$81,859	877,867			789,399					\$744,948					2,494,073	17,296,880
Sorbents	-	109,083								146,903					255,985	1,914,543
Urea	5,454									56,704					62,158	576,633
Re-emission Chemical		35,345													35,345	176,633
Dibasic Acid	-														-	-
Activated Carbon	-									-					-	84,000
Lime (water emissions)	-	-													-	16,707
Total	\$87,314	\$1,072,139	\$15,285		\$827,770	\$10,500	\$14,781			\$948,554					\$2,976,343	\$22,619,461

Notes:

Detail amounts may not add to totals shown due to rounding.
 Data is reflected at 100% ownership.
 Schedule excludes in-transit and terminal activity.
 Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.
 Re-emission chemical reagent expense is not recoverable in NC.
 Lime (water emissions) expense is not recoverable in SC.

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED CONSUMPTION AND INVENTORY REPORT
JULY 2019

Description	Allen	Belews Creek	Buck	Cliffside	Dan River	Lee	Lee	Lincoln	Marshall	Mill Creek	Rockingham	Current Month	Total 12 ME July 2019
	Steam	Steam	CC	Steam - Dual Fuel	CC	CC	Steam/CT	CT	Steam	CT	CT		
Coal Data:													
Beginning balance	284,646	977,058		394,710			-		953,747			2,610,161	2,078,981
Tons received during period	12,262	240,490		255,633					260,749			769,134	7,977,299
Inventory adjustments	(359)	10,320		0			-		(0)			9,961	(185,757)
Tons burned during period	66,804	409,160		252,682			-		417,896			1,146,542	7,627,808
Ending balance	229,746	818,708		397,661			-		796,600			2,242,714	2,242,714
MBTUs per ton burned	23.70	24.80		24.40			-		25.06			24.74	24.71
Cost of ending inventory (\$/ton)	86.83	83.46		82.82			-		95.48			87.96	87.96
Oil Data:													
Beginning balance	74,568	142,188	-	184,281	-	-	674,562	9,739,402	360,971	4,366,782	3,238,190	18,780,944	18,871,437
Gallons received during period	66,661	378,775	-	81,614	-	-	-	-	51,774	-	-	578,824	8,408,772
Miscellaneous adjustments	-	(25,646)	-	(12,007)	-	-	-	-	-	-	-	(34,062)	(367,182)
Gallons burned during period	52,956	303,217	-	51,756	-	-	48,227	229	56,172	-	-	516,148	8,103,469
Ending balance	88,273	192,100	-	202,132	-	-	626,335	9,739,173	356,573	4,366,782	3,238,190	18,809,558	18,809,558
Cost of ending inventory (\$/gal)	2.00	2.00	-	2.02	-	-	2.33	2.10	2.04	2.47	2.17	2.20	2.20
Natural Gas Data:													
Beginning balance													
MCF received during period			3,172,683	832,324	3,246,097	3,911,188	17	4,307		15,327	975,777	12,157,721	127,596,230
MCF burned during period			3,172,683	832,324	3,246,097	3,911,188	17	4,307		15,327	975,777	12,157,721	127,596,230
Ending balance													
Biogas Data:													
Beginning balance													
MCF received during period			-		-	-						-	171,712
MCF burned during period			-		-	-						-	171,712
Ending balance													
Limestone Data:													
Beginning balance	23,996	53,123		22,127					35,156			134,403	152,181
Tons received during period	6,944	6,820		15,901					13,543			43,208	393,085
Inventory adjustments	-	-		-					-			-	(14,991)
Tons consumed during period	1,801	20,652		16,394					20,196			59,043	411,708
Ending balance	29,139	39,292		21,634					28,503			118,568	118,568
Cost of ending inventory (\$/ton)	45.44	37.97		39.47					36.89			39.82	39.82
Ammonia Data:													
Beginning balance		1,492										1,492	1,523
Tons received during period		1,151										1,151	3,470
Tons consumed during period		793										793	3,144
Ending balance		1,850										1,850	1,850
Cost of ending inventory (\$/ton)		503.35										503.35	503.35
												Qtr Ending June 2019	Total 12 ME June 2019

Notes:
Detail amounts may not add to totals shown due to rounding.
Schedule excludes in-transit and terminal activity.
Gas is burned as received; therefore, inventory balances are not maintained.

DUKE ENERGY CAROLINAS
ANALYSIS OF COAL PURCHASED
JULY 2019

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ALLEN	SPOT	-	\$ -	\$ -
	CONTRACT	12,262	926,395	75.55
	FIXED TRANSPORTATION / ADJUSTMENTS	-	671,257	-
	TOTAL	12,262	1,597,653	130.29
BELEWS CREEK	SPOT	38,276	2,883,787	75.34
	CONTRACT	202,214	13,416,105	66.35
	FIXED TRANSPORTATION / ADJUSTMENTS	-	6,394,935	-
	TOTAL	240,490	22,694,827	94.37
CLIFFSIDE	SPOT	25,995	1,802,749	69.35
	CONTRACT	229,638	14,755,136	64.25
	FIXED TRANSPORTATION / ADJUSTMENTS	-	5,212,560	-
	TOTAL	255,633	21,770,444	85.16
MARSHALL	SPOT	12,817	1,000,131	78.03
	CONTRACT	247,932	15,676,785	63.23
	FIXED TRANSPORTATION / ADJUSTMENTS	-	15,181,733	-
	TOTAL	260,749	31,858,649	122.18
ALL PLANTS	SPOT	77,088	5,686,667	73.77
	CONTRACT	692,046	44,774,421	64.70
	FIXED TRANSPORTATION / ADJUSTMENTS	-	27,460,485	-
	TOTAL	769,134	\$ 77,921,573	\$ 101.31

DUKE ENERGY CAROLINAS
ANALYSIS OF COAL QUALITY RECEIVED
JULY 2019

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
ALLEN	6.81	10.71	12,070	0.78
BELEWS CREEK	6.47	10.43	12,454	1.45
CLIFFSIDE	9.81	8.11	12,232	2.24
MARSHALL	6.19	9.11	12,744	1.97

DUKE ENERGY CAROLINAS
ANALYSIS OF OIL PURCHASED
JULY 2019

	ALLEN	BELEWS CREEK
VENDOR	HighTowers	HighTowers
SPOT/CONTRACT	Contract	Contract
SULFUR CONTENT %	0	0
GALLONS RECEIVED	66,661	378,775
TOTAL DELIVERED COST	\$ 131,031	\$ 757,425
DELIVERED COST/GALLON	\$ 1.97	\$ 2.00
BTU/GALLON	138,000	138,000
	CLIFFSIDE	MARSHALL
VENDOR	HighTowers	HighTowers
SPOT/CONTRACT	Contract	Contract
SULFUR CONTENT %	0	0
GALLONS RECEIVED	81,614	51,774
TOTAL DELIVERED COST	\$ 164,057	\$ 106,966
DELIVERED COST/GALLON	\$ 2.01	\$ 2.07
BTU/GALLON	138,000	138,000

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
August, 2018 - July, 2019
Nuclear Units

ELECTRONICALLY FILED - 2019 August 29 10:14 AM - SCPSC - Docket # 1989-9-E - Page 16 of 52

<u>Unit Name</u>	<u>Net Generation (mWh)</u>	<u>Capacity Rating (mW)</u>	<u>Capacity Factor (%)</u>	<u>Equivalent Availability (%)</u>
Oconee 1	6,767,085	847	91.20	90.27
Oconee 2	7,589,501	848	102.17	99.99
Oconee 3	7,611,376	859	101.15	99.99
McGuire 1	9,280,872	1,158	91.49	90.27
McGuire 2	9,493,877	1,158	93.59	91.87
Catawba 1	9,502,203	1,160	93.51	92.99
Catawba 2	10,131,979	1,150	100.58	99.98

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
August, 2018 through July, 2019
Combined Cycle Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Buck CC	11	1,262,620	206	69.97	76.60
Buck CC	12	1,268,854	206	70.31	76.92
Buck CC	ST10	1,920,380	312	70.26	83.97
Buck CC	Block Total	4,451,854	724	70.19	79.87
Dan River CC	8	1,446,028	199	82.95	86.67
Dan River CC	9	1,430,337	199	82.05	86.21
Dan River CC	ST7	2,120,096	320	75.63	91.63
Dan River CC	Block Total	4,996,461	718	79.44	88.75
WS Lee CC	11	1,568,478	231	77.47	79.28
WS Lee CC	12	1,572,663	231	77.87	78.88
WS Lee CC	ST10	2,160,129	337	73.17	78.54
WS Lee CC	Block Total	5,301,270	799	75.77	78.89

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

**Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
August, 2018 through July, 2019**

Baseload Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Belews Creek 1	4,621,205	1,110	47.53	84.42
Belews Creek 2	2,702,721	1,110	27.80	62.35
Marshall 3	2,510,262	658	43.55	79.54
Marshall 4	3,287,761	660	56.87	83.29

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
August, 2018 through July, 2019**

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Cliffside 6	3,983,379	847	53.69	72.97
Marshall 1	1,044,649	380	31.38	85.54
Marshall 2	655,246	380	19.68	56.37

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
August, 2018 through July, 2019
Other Cycling Steam Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Allen	1	35,112	167	2.40	88.30
Allen	2	36,226	167	2.48	88.30
Allen	3	88,180	270	3.73	76.29
Allen	4	151,650	267	6.48	82.29
Allen	5	318,339	259	14.03	86.61
Cliffside	5	1,362,838	546	28.49	74.90
Lee	3	-1,876	173	0.00	59.13

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
August, 2018 through July, 2019
Combustion Turbine Stations**

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Lee CT	19,541	96	96.66
Lincoln CT	15,857	1,565	90.75
Mill Creek CT	111,122	748	99.33
Rockingham CT	1,211,570	895	91.25

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas
Power Plant Performance Data**

Exhibit A
Schedule 10
Page 7 of 7

**Twelve Month Summary
August, 2018 through July, 2019
Hydroelectric Stations**

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Conventional Hydroelectric Stations:			
Bear Creek	26,013	9.5	67.56
Bridgewater	126,801	31.5	94.84
Bryson	4,055	0.9	91.44
Cedar Cliff	30,274	6.8	98.67
Cedar Creek	214,295	45.0	98.74
Cowans Ford	364,182	324.0	65.17
Dearborn	221,197	42.0	86.32
Fishing Creek	227,156	50.0	83.48
Franklin	2,255	1.0	59.69
Gaston Shoals	13,121	4.5	97.51
Great Falls	-79	12.0	79.93
Keowee	113,402	152.0	94.48
Lookout Shoals	184,538	27.0	99.52
Mission	4,077	1.8	53.36
Mountain Island	242,765	62.0	87.48
Nantahala	270,945	50.0	90.14
Ninety-Nine Islands	94,291	15.2	89.26
Oxford	147,361	40.0	75.49
Queens Creek	5,963	1.4	97.85
Rhodhiss	127,732	33.4	97.03
Tennessee Creek	33,769	9.8	64.19
Thorpe	120,770	19.7	97.19
Tuckasegee	11,359	2.5	96.87
Tuxedo	30,795	6.4	97.84
Wateree	419,223	85.0	88.26
Wylie	118,323	72.0	25.05
Pumped Storage Hydroelectric Stations:			
Gross Generation			
Bad Creek	2,200,551	1,360.0	95.75
Jocassee	1,100,693	780.0	90.50
Energy for Pumping			
Bad Creek	-2,796,972		
Jocassee	-1,189,584		
Net Generation			
Bad Creek	-596,421		
Jocassee	-88,891		

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

Period: July, 2019

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Oconee	1	None					
	2	None					
	3	None					
McGuire	1	None					
	2	None					
Catawba	1	None					
	2	None					

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
July 2019**

Belews Creek Station

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
1	7/25/2019 9:05:00 AM To 7/25/2019 4:36:00 PM	Unsch	8528 Dry Scrubber Instruments And Controls	MFT resulting from loss of indication of recycle pump (s) in service. .	
2	7/19/2019 3:02:00 AM To 7/19/2019 8:54:00 AM	Unsch	0360 Burners	Low load operation and flame scanners flamed out resulting in the loss of two mills.	
2	7/25/2019 9:05:00 AM To 7/26/2019 2:37:00 PM	Unsch	8528 Dry Scrubber Instruments And Controls	MFT resulting from loss of indication of recycle pump (s) in service.	

Buck Combined Cycle Station

No Outages at Baseload Units During the Month.

Dan River Combined Cycle Station

No Outages at Baseload Units During the Month.

Marshall Station

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
4	7/4/2019 2:07:00 AM To 7/6/2019 7:05:00 AM	Sch	3412 Feedwater Pump Drive - Steam Turbine	4B BFPT Secondary Operating Cylinder Repairs	

WS Lee Combined Cycle

No Outages at Baseload Units During the Month.

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

Exhibit B
Page 3 of 25

July 2019
Oconee Nuclear Station

	<u>Unit 1</u>		<u>Unit 2</u>		<u>Unit 3</u>	
(A) MDC (mW)	847		848		859	
(B) Period Hours	744		744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	634,632	100.71	641,545	101.69	640,651	100.24
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	0	0.00	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-4,464	-0.71	-10,633	-1.69	-1,555	-0.24
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00	0	0.00
(J) Net mWh Possible in Period	630,168	100.00%	630,912	100.00%	639,096	100.00%
(K) Equivalent Availability (%)	99.95		100.00		100.00	
(L) Output Factor (%)	100.71		101.69		100.24	
(M) Heat Rate (BTU/NkWh)	10,272		10,181		10,169	

* Estimate
FOOTNOTE: D and F Include Ramping Losses

ELECTRONICALLY FILED - 2019 August 29 10:14 AM - SCPSC - Docket # 1989-9-E - Page 25 of 52

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

Exhibit B
Page 4 of 25

July 2019
McGuire Nuclear Station

	<u>Unit 1</u>		<u>Unit 2</u>	
(A) MDC (mW)	1158		1158	
(B) Period Hours	744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	868,159	100.77	867,861	100.73
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-6,607	-0.77	-6,309	-0.73
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	861,552	100.00%	861,552	100.00%
(K) Equivalent Availability (%)		99.98		100.00
(L) Output Factor (%)		100.77		100.73
(M) Heat Rate (BTU/NkWh)		10,089		10,137

* Estimate
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Carolinas
Base Load Power Plant Performance Review Plan**

Exhibit B
Page 5 of 25

**July 2019
Catawba Nuclear Station**

	<u>Unit 1</u>		<u>Unit 2</u>	
(A) MDC (mW)	1160		1150	
(B) Period Hours	744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	861,593	99.83	844,515	98.70
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	850	0.10
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	1,447	0.17	10,235	1.20
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	863,040	100.00%	855,600	100.00%
(K) Equivalent Availability (%)	100.00		99.90	
(L) Output Factor (%)	99.83		98.70	
(M) Heat Rate (BTU/NkWh)	10,208		10,230	

* Estimate
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
July 2019**

Belews Creek Station

	Unit 1	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	744	744
(C) Net Generation (mWh)	563,139	529,621
(D) Capacity Factor (%)	68.19	64.13
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	8,344	39,294
(J) Forced Outages: percent of Period Hrs	1.01	4.76
(K) Net mWh Not Generated due to Partial Forced Outages	8,807	6,591
(L) Forced Derates: percent of Period Hrs	1.07	0.80
(M) Net mWh Not Generated due to Economic Dispatch	245,551	250,334
(N) Economic Dispatch: percent of Period Hrs	29.73	30.31
(O) Net mWh Possible in Period	825,840	825,840
(P) Equivalent Availability (%)	97.92	94.44
(Q) Output Factor (%)	68.89	67.34
(R) Heat Rate (BTU/NkWh)	9,107	9,556

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
July 2019**

Buck Combined Cycle Station

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	312	724
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	127,646	127,169	198,456	453,271
(D) Capacity Factor (%)	83.29	82.97	85.49	84.15
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	20,832	20,832	0	41,664
(H) Scheduled Derates: percent of Period Hrs	13.59	13.59	0.00	7.73
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	4,786	5,263	33,672	43,721
(N) Economic Dispatch: percent of Period Hrs	3.12	3.43	14.51	8.12
(O) Net mWh Possible in Period	153,264	153,264	232,128	538,656
(P) Equivalent Availability (%)	86.41	86.41	100.00	92.27
(Q) Output Factor (%)	83.29	82.97	85.49	84.15
(R) Heat Rate (BTU/NkWh)	10,325	10,131	2,568	6,875

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
July 2019**

Dan River Combined Cycle Station

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	199	199	320	718
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	128,004	128,682	201,036	457,722
(D) Capacity Factor (%)	86.46	86.91	84.44	85.68
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	20,832	20,832	0	41,664
(H) Scheduled Derates: percent of Period Hrs	14.07	14.07	0.00	7.80
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	0	0	37,044	37,044
(N) Economic Dispatch: percent of Period Hrs	0.00	0.00	15.56	6.93
(O) Net mWh Possible in Period	148,056	148,056	238,080	534,192
(P) Equivalent Availability (%)	85.93	85.93	100.00	92.20
(Q) Output Factor (%)	86.46	86.91	84.44	85.68
(R) Heat Rate (BTU/NkWh)	10,784	10,739	2,630	7,190

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
July 2019**

Marshall Station

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	744	744
(C) Net Generation (mWh)	381,362	379,468
(D) Capacity Factor (%)	77.90	77.28
(E) Net mWh Not Generated due to Full Scheduled Outages	0	34,958
(F) Scheduled Outages: percent of Period Hrs	0.00	7.12
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	14,050	4,447
(L) Forced Derates: percent of Period Hrs	2.87	0.91
(M) Net mWh Not Generated due to Economic Dispatch	94,140	72,167
(N) Economic Dispatch: percent of Period Hrs	19.23	14.70
(O) Net mWh Possible in Period	489,552	491,040
(P) Equivalent Availability (%)	97.13	91.98
(Q) Output Factor (%)	77.90	83.20
(R) Heat Rate (BTU/NkWh)	9,491	9,319

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
July 2019**

WS Lee Combined Cycle

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	237	236	337	810
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	168,369	168,734	238,051	575,154
(D) Capacity Factor (%)	95.49	96.10	94.94	95.44
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	17,856	17,856
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	7.12	2.96
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	7,959	6,850	0	14,809
(N) Economic Dispatch: percent of Period Hrs	4.51	3.90	0.00	2.46
(O) Net mWh Possible in Period	176,328	175,584	250,728	602,640
(P) Equivalent Availability (%)	100.00	100.00	92.88	97.04
(Q) Output Factor (%)	95.49	96.10	94.94	95.44
(R) Heat Rate (BTU/NkWh)	0	0	0	0

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

**Duke Energy Carolinas
Intermediate Power Plant Performance
Review Plan
July 2019**

Cliffside Station

Cliffside 6

(A) MDC (mW)	849
(B) Period Hrs	744
(C) Net Generation (mWh)	558,934
(D) Net mWh Possible in Period	631,656
(E) Equivalent Availability (%)	96.06
(F) Output Factor (%)	88.49
(G) Capacity Factor (%)	88.49

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas
Peaking Power Plant Performance
Review Plan
July 2019**

Cliffside Station

Unit 5

(A)	MDC (mW)	546
(B)	Period Hrs	744
(C)	Net Generation (mWh)	175,800
(D)	Net mWh Possible in Period	406,224
(E)	Equivalent Availability (%)	78.33
(F)	Output Factor (%)	65.79
(G)	Capacity Factor (%)	43.28

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas
Base Load Power Plant Performance Review Plan**

Exhibit B
Page 13 of 25

**August 2018 - July 2019
Oconee Nuclear Station**

	<u>Unit 1</u>		<u>Unit 2</u>		<u>Unit 3</u>	
(A) MDC (mW)	847		848		859	
(B) Period Hours	8760		8760		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	6,767,085	91.20	7,589,501	102.17	7,611,376	101.15
(D) Net mWh Not Gen due to Full Schedule Outages	524,378	7.07	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	29,699	0.40	371	0.00	381	0.01
(F) Net mWh Not Gen due to Full Forced Outages	151,811	2.05	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-53,252	-0.72	-161,392	-2.17	-86,917	-1.16
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00	0	0.00
(J) Net mWh Possible in Period	7,419,720	100.00%	7,428,480	100.00%	7,524,840	100.00%
(K) Equivalent Availability (%)		90.27		99.99		99.99
(L) Output Factor (%)		100.35		102.17		101.15
(M) Heat Rate (BTU/NkWh)		10,236		10,116		10,086

* Estimate
FOOTNOTE: D and F Include Ramping Losses

ELECTRONICALLY FILED - 2019 August 29 10:14 AM - SCPSC - Docket # 1989-9-E - Page 35 of 52

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

Exhibit B
Page 14 of 25

August 2018 - July 2019
McGuire Nuclear Station

	<u>Unit 1</u>	<u>Unit 2</u>		
(A) MDC (mW)	1158	1158		
(B) Period Hours	8760	8760		
(C) Net Gen (mWh) and Capacity Factor (%)	9,280,872	91.49	9,493,877	93.59
(D) Net mWh Not Gen due to Full Schedule Outages	687,852	6.78	791,628	7.80
* (E) Net mWh Not Gen due to Partial Scheduled Outages	67,222	0.66	22,030	0.22
(F) Net mWh Not Gen due to Full Forced Outages	165,690	1.63	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-57,556	-0.56	-163,455	-1.61
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	10,144,080	100.00%	10,144,080	100.00%
(K) Equivalent Availability (%)		90.27		91.87
(L) Output Factor (%)		99.90		101.51
(M) Heat Rate (BTU/NkWh)		10,025		10,032

* Estimate
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

Exhibit B
Page 15 of 25

August 2018 - July 2019
Catawba Nuclear Station

	<u>Unit 1</u>	<u>Unit 2</u>		
(A) MDC (mW)	1160	1150		
(B) Period Hours	8760	8760		
(C) Net Gen (mWh) and Capacity Factor (%)	9,502,203	93.51	10,131,979	100.58
(D) Net mWh Not Gen due to Full Schedule Outages	682,776	6.72	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	45,944	0.45	2,038	0.02
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-69,323	-0.68	-60,017	-0.60
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	10,161,600	100.00%	10,074,000	100.00%
(K) Equivalent Availability (%)		92.99		99.98
(L) Output Factor (%)		100.25		100.58
(M) Heat Rate (BTU/NkWh)		10,106		10,048

* Estimate
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
August, 2018 through July, 2019**

Belews Creek Station

	Unit 1	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	4,621,205	2,702,721
(D) Capacity Factor (%)	47.53	27.80
(E) Net mWh Not Generated due to Full Scheduled Outages	1,279,997	3,387,350
(F) Scheduled Outages: percent of Period Hrs	13.16	34.84
(G) Net mWh Not Generated due to Partial Scheduled Outages	2,443	14,669
(H) Scheduled Derates: percent of Period Hrs	0.03	0.15
(I) Net mWh Not Generated due to Full Forced Outages	87,875	138,325
(J) Forced Outages: percent of Period Hrs	0.90	1.42
(K) Net mWh Not Generated due to Partial Forced Outages	144,246	121,004
(L) Forced Derates: percent of Period Hrs	1.48	1.24
(M) Net mWh Not Generated due to Economic Dispatch	3,587,835	3,359,531
(N) Economic Dispatch: percent of Period Hrs	36.90	34.55
(O) Net mWh Possible in Period	9,723,600	9,723,600
(P) Equivalent Availability (%)	84.42	62.35
(Q) Output Factor (%)	73.84	65.53
(R) Heat Rate (BTU/NkWh)	9,322	9,695

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
August, 2018 through July, 2019**

Buck Combined Cycle Station

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	312	724
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,262,620	1,268,854	1,920,380	4,451,854
(D) Capacity Factor (%)	69.97	70.31	70.26	70.19
(E) Net mWh Not Generated due to Full Scheduled Outages	295,404	292,599	414,310	1,002,313
(F) Scheduled Outages: percent of Period Hrs	16.37	16.21	15.16	15.80
(G) Net mWh Not Generated due to Partial Scheduled Outages	123,237	123,923	23,686	270,846
(H) Scheduled Derates: percent of Period Hrs	6.83	6.87	0.87	4.27
(I) Net mWh Not Generated due to Full Forced Outages	3,639	0	0	3,639
(J) Forced Outages: percent of Period Hrs	0.20	0.00	0.00	0.06
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	119,659	119,184	374,744	613,587
(N) Economic Dispatch: percent of Period Hrs	6.63	6.60	13.71	9.67
(O) Net mWh Possible in Period	1,804,560	1,804,560	2,733,120	6,342,240
(P) Equivalent Availability (%)	76.60	76.92	83.97	79.87
(Q) Output Factor (%)	84.33	84.55	83.15	83.88
(R) Heat Rate (BTU/NkWh)	10,223	9,975	2,435	6,793

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
August, 2018 through July, 2019**

Dan River Combined Cycle Station

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	199	199	320	718
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,446,028	1,430,337	2,120,096	4,996,461
(D) Capacity Factor (%)	82.95	82.05	75.63	79.44
(E) Net mWh Not Generated due to Full Scheduled Outages	89,444	97,842	145,648	332,934
(F) Scheduled Outages: percent of Period Hrs	5.13	5.61	5.20	5.29
(G) Net mWh Not Generated due to Partial Scheduled Outages	134,801	134,191	8,514	277,506
(H) Scheduled Derates: percent of Period Hrs	7.73	7.70	0.30	4.41
(I) Net mWh Not Generated due to Full Forced Outages	8,139	8,338	14,331	30,808
(J) Forced Outages: percent of Period Hrs	0.47	0.48	0.51	0.49
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	66,235	66,235
(L) Forced Derates: percent of Period Hrs	0.00	0.00	2.36	1.05
(M) Net mWh Not Generated due to Economic Dispatch	64,828	72,532	448,376	585,737
(N) Economic Dispatch: percent of Period Hrs	3.72	4.16	16.00	9.31
(O) Net mWh Possible in Period	1,743,240	1,743,240	2,803,200	6,289,680
(P) Equivalent Availability (%)	86.67	86.21	91.63	88.75
(Q) Output Factor (%)	88.02	88.21	80.41	84.67
(R) Heat Rate (BTU/NkWh)	10,619	10,599	2,369	7,113

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
August, 2018 through July, 2019**

Marshall Station

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	2,510,262	3,287,761
(D) Capacity Factor (%)	43.55	56.87
(E) Net mWh Not Generated due to Full Scheduled Outages	554,124	773,036
(F) Scheduled Outages: percent of Period Hrs	9.61	13.37
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	360
(H) Scheduled Derates: percent of Period Hrs	0.00	0.01
(I) Net mWh Not Generated due to Full Forced Outages	608,990	114,477
(J) Forced Outages: percent of Period Hrs	10.57	1.98
(K) Net mWh Not Generated due to Partial Forced Outages	16,033	77,975
(L) Forced Derates: percent of Period Hrs	0.28	1.35
(M) Net mWh Not Generated due to Economic Dispatch	2,074,671	1,527,991
(N) Economic Dispatch: percent of Period Hrs	35.99	26.43
(O) Net mWh Possible in Period	5,764,080	5,781,600
(P) Equivalent Availability (%)	79.54	83.29
(Q) Output Factor (%)	68.99	73.86
(R) Heat Rate (BTU/NkWh)	9,697	9,528

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

**Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
August, 2018 through July, 2019**

WS Lee Combined Cycle

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	231	231	337	799
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,568,478	1,572,663	2,160,129	5,301,270
(D) Capacity Factor (%)	77.47	77.87	73.17	75.77
(E) Net mWh Not Generated due to Full Scheduled Outages	280,366	279,636	394,998	955,000
(F) Scheduled Outages: percent of Period Hrs	13.85	13.85	13.38	13.65
(G) Net mWh Not Generated due to Partial Scheduled Outages	37,343	35,211	92,550	165,104
(H) Scheduled Derates: percent of Period Hrs	1.84	1.74	3.14	2.36
(I) Net mWh Not Generated due to Full Forced Outages	100,338	110,538	145,865	356,740
(J) Forced Outages: percent of Period Hrs	4.96	5.47	4.94	5.10
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	173	173
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.01	0.00
(M) Net mWh Not Generated due to Economic Dispatch	38,173	21,563	158,406	218,142
(N) Economic Dispatch: percent of Period Hrs	1.89	1.07	5.37	3.12
(O) Net mWh Possible in Period	2,024,698	2,019,611	2,952,120	6,996,429
(P) Equivalent Availability (%)	79.28	78.88	78.54	78.89
(Q) Output Factor (%)	96.47	97.41	90.63	94.27
(R) Heat Rate (BTU/NkWh)	9,141	9,063	2,299	6,330

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

**Duke Energy Carolinas
Intermediate Power Plant
Performance Review Plan
August, 2018 through July, 2019**

Cliffside Station

Units	Unit 6
(A) MDC (mW)	847
(B) Period Hrs	8,760
(C) Net Generation (mWh)	3,983,379
(D) Net mWh Possible in Period	7,418,875
(E) Equivalent Availability (%)	72.97
(F) Output Factor (%)	77.82
(G) Capacity Factor (%)	53.69

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Carolinas
Peaking Power Plant
Performance Review Plan
August, 2018 through July, 2019**

Cliffside Station

Units	Unit 5
(A) MDC (mW)	546
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,362,838
(D) Net mWh Possible in Period	4,782,960
(E) Equivalent Availability (%)	72.27
(F) Output Factor (%)	67.17
(G) Capacity Factor (%)	28.49

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Outages for 100 mW or Larger Units
July, 2019

Exhibit B
Page 23 of 25

<u>Unit Name</u>	<u>Capacity Rating (mW)</u>	<u>Full Outage Hours</u>		<u>Total</u>
		<u>Scheduled</u>	<u>Unscheduled</u>	
Oconee 1	847	0.00	0.00	0.00
Oconee 2	848	0.00	0.00	0.00
Oconee 3	859	0.00	0.00	0.00
McGuire 1	1,158	0.00	0.00	0.00
McGuire 2	1,158	0.00	0.00	0.00
Catawba 1	1,160	0.00	0.00	0.00
Catawba 2	1,150	0.00	0.00	0.00

Duke Energy Carolinas
Outages for 100 mW or Larger Units
July 2019

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Allen Steam 1	167	0.00	0.00	0.00
Allen Steam 2	167	0.00	0.00	0.00
Allen Steam 3	270	0.00	0.00	0.00
Allen Steam 4	267	22.50	0.00	22.50
Allen Steam 5	259	0.00	0.00	0.00
Belews Creek Steam 1	1,110	0.00	7.52	7.52
Belews Creek Steam 2	1,110	0.00	35.40	35.40
Buck CC 11	206	0.00	0.00	0.00
Buck CC 12	206	0.00	0.00	0.00
Buck CC ST10	312	0.00	0.00	0.00
Cliffside Steam 5	546	17.78	103.92	121.70
Cliffside Steam 6	849	0.00	0.00	0.00
Dan River CC 8	199	0.00	0.00	0.00
Dan River CC 9	199	0.00	0.00	0.00
Dan River CC ST7	320	0.00	0.00	0.00
Lee Steam 3	173	0.00	0.00	0.00
Marshall Steam 1	380	0.00	0.00	0.00
Marshall Steam 2	380	37.85	0.00	37.85
Marshall Steam 3	658	0.00	0.00	0.00
Marshall Steam 4	660	52.97	0.00	52.97
Rockingham CT1	179	0.00	0.00	0.00
Rockingham CT2	179	0.00	0.00	0.00
Rockingham CT3	179	0.00	5.47	5.47
Rockingham CT4	179	0.00	20.95	20.95
Rockingham CT5	179	0.00	0.00	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

Duke Energy Carolinas
Outages for 100 mW or Larger Units
July 2019

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
WS Lee CC 11	237	0.00	0.00	0.00
WS Lee CC 12	236	0.00	0.00	0.00
WS Lee CC ST 10	337	0.00	0.00	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

DUKE ENERGY CAROLINAS
DETAILS OF FUEL AND FUEL-RELATED COSTS

Fuel and fuel-related costs:	June 2019
Steam Generation - Account 501	
0501110 coal consumed - steam	\$ 64,461,914
0501310 fuel oil consumed - steam	878,936
0501330 fuel oil light-off - steam	615,521
Total Steam Generation - Account 501	<u>65,956,371</u>
Nuclear Generation - Account 518	
0518100 burnup of owned fuel	23,105,119
Other Generation - Account 547	
0547100, 0547124 natural gas consumed - Combustion Turbine	941,218
0547100, 0547124 natural gas capacity - Combustion Turbine	190,446
0547100 natural gas consumed - Steam	466,984
0547101 natural gas consumed - Combined Cycle	25,984,144
0547101 natural gas capacity - Combined Cycle	3,532,580
0547106 biogas consumed - Combined Cycle	-
0547200 fuel oil consumed - Combustion Turbine	46,307
Total Other Generation - Account 547	<u>31,161,679</u>
Purchased Power and Net Interchange - Account 555	
Fuel and fuel-related component of purchased power	18,058,985
Fuel and fuel-related component of DERP purchases	30,158
PURPA purchased power capacity	2,502,503
DERP purchased power capacity	4,199
Total Purchased Power and Net Interchange - Account 555	<u>20,595,845</u>
Less:	
Fuel and fuel-related costs recovered through intersystem sales	2,508,085
Fuel in loss compensation	103,532
Solar Integration Charge	1,034
Total Fuel Credits - Account 447/456	<u>2,612,651</u>
Environmental Costs	
0509000, 0557451 emission allowance expense	376
0502020, 0502030, 0502040, 0502082, 0548020 reagent expense	2,386,449
0502080, 0502083, 0502090, 0502150 sorbent expense	149,390
Emission allowance gains	-
Less reagents expense recovered through intersystem sales - Account 447	21,302
Less emissions expense recovered through intersystem sales - Account 447	8,834
Total Environmental Component of Recovery	<u>2,506,079</u>
Total Fuel and Fuel-related Costs excluding DERP incremental costs	<u>\$ 140,712,443</u>
DERP incremental costs	525,523
Total Fuel and Fuel-related Costs to be Recovered	<u>\$ 141,237,966</u>

Notes: Detail amounts may not add to totals shown due to rounding.
Report reflects net ownership costs of jointly owned facilities.

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
June 2019

Line No.		Residential	Commercial	Industrial	Total
1	Actual System kWh sales				7,541,462,943
2	DERP Net Metered kWh generation				10,992,414
3	Adjusted System kWh sales				7,552,455,357
4	Actual S.C. Retail kWh sales	579,501,697	492,400,764	781,943,362	1,853,845,823
5	DERP Net Metered kWh generation	6,832,854	2,415,464	1,744,096	10,992,414
6	Adjusted S.C. Retail kWh sales	586,334,551	494,816,228	783,687,458	1,864,838,237
Base fuel component of recovery: non-capacity					
7	Incurred System base fuel - non-capacity expense				\$131,946,478
8	Eliminate avoided fuel benefit of S.C. net metering				357,178
9	Adjusted Incurred System base fuel - non-capacity expense				\$132,303,656
10	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)				1.7518
11	S.C. Retail portion of adjusted incurred system expense	\$10,271,389	\$8,668,174	\$13,728,610	\$32,668,173
12	Assign 100 % of Avoided Fuel Benefit of S.C net metering	(183,054)	(85,370)	(88,754)	(357,178)
13	S.C. Retail portion of incurred system expense	\$10,088,335	\$8,582,804	\$13,639,856	\$32,310,995
14	Billed base fuel - non-capacity rate (¢/kWh)	1.9648	1.9648	1.9648	1.9648
15	Billed base fuel - non-capacity revenue	\$11,386,049	\$9,674,690	\$15,363,623	\$36,424,362
16	DERP NEM incentive - fuel component	(77,914)	(36,336)	(37,777)	(152,027)
17	Adjusted S.C. billed base fuel - non-capacity revenue	\$11,308,135	\$9,638,354	\$15,325,846	\$36,272,335
18	S.C. base fuel - non-capacity (over)/under recovery [See footnote]	(\$1,219,800)	(\$1,055,550)	(\$1,685,990)	(\$3,961,340)
19	Adjustment	-	-	-	-
20	Total S.C. base fuel - non-capacity (over)/under recovery [See footnote]	(\$1,219,800)	(\$1,055,550)	(\$1,685,990)	(\$3,961,340)
Base fuel component of recovery: capacity					
21	Incurred base fuel - capacity rates by class (¢/kWh)	0.1353	0.0743	0.0486	0.0826
22	Incurred S.C. base fuel - capacity expense	\$784,313	\$365,775	\$380,275	\$1,530,363
23	Billed base fuel - capacity rates by class (¢/kWh)	0.1274	0.1158	0.0901	0.1086
24	Billed S.C. base fuel - capacity revenue	738,285	570,200	704,531	2,013,016
25	S.C. base fuel - capacity (over)/under recovery [See footnote]	46,028	(204,425)	(324,256)	(482,653)
26	Adjustment	-	-	-	-
27	Total S.C. base fuel - capacity (over)/under recovery [See footnote]	\$46,028	(\$204,425)	(\$324,256)	(\$482,653)
Environmental component of recovery					
28	Incurred environmental rates by class (¢/kWh)	0.0545	0.0299	0.0196	0.0332
29	Incurred S.C. environmental expense	\$315,724	\$147,242	\$153,079	\$616,045
30	Billed environmental rates by class (¢/kWh)	0.0166	0.0193	0.0168	0.0174
31	Billed S.C. environmental revenue	96,197	95,033	131,366	322,596
32	S.C. environmental (over)/under recovery [See footnote]	219,527	52,209	21,713	293,449
33	Adjustment	-	-	-	-
34	Total S.C. environmental (over)/under recovery [See footnote]	\$219,527	\$52,209	\$21,713	\$293,449

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
June 2019

Line No.		Residential	Commercial	Industrial	Total	
Distributed Energy Resource Program component of recovery: avoided costs						
35	Incurring S.C. DERP avoided cost rates by class (¢/kWh)	Input	0.0007	0.0004	0.0003	0.0005
36	Incurring S.C. DERP avoided cost expense	L4 * L35 / 100	\$4,328	\$2,019	\$2,099	\$8,446
37	Billed S.C. DERP avoided cost rates by class (¢/kWh)	Input	0.0006	0.0005	0.0004	0.0005
38	Billed S.C. DERP avoided cost revenue	L4 * L37 / 100	3,477	2,462	3,128	9,067
39	S.C. DERP avoided cost (over)/under recovery [See footnote]	L38 - L36	851	(443)	(1,029)	(621)
40	Adjustment	Input	-	-	-	-
41	Total S.C. DERP avoided cost (over)/under recovery [See footnote]	L39 + L40	\$851	(\$443)	(\$1,029)	(\$621)
Distributed Energy Resource Program component of recovery: incremental costs						
42	Incurring S.C. DERP incremental expense	Input	\$268,463	\$125,201	\$130,165	\$523,829
43	Billed S.C. DERP incremental rates (\$/account)	Input	\$0.89	\$4.28	\$99.56	
44	Billed S.C. DERP incremental revenue	Input	435,725	318,766	146,901	901,392
45	S.C. DERP incremental (over)/under recovery [See footnote]	L44 - L42	(167,262)	(193,565)	(16,736)	(377,563)
46	Adjustment	Input	-	-	-	-
47	Total S.C. DERP incremental (over)/under recovery [See footnote]	L45 + L46	(\$167,262)	(\$193,565)	(\$16,736)	(\$377,563)
48	Total S.C. Retail (over)/under recovery [See footnote]	L20 + L27 + L34 + L41 + L47	(1,120,656)	(1,401,774)	(2,006,298)	(4,528,728)

Year 2018-2019					
Cumulative (over) / under recovery - BASE FUEL NON-CAPACITY					
	Cumulative	Residential	Commercial	Industrial	Total Company
_1/ Balance ending May 2018	\$64,562,410				
June 2018 - actual	68,657,779	1,313,984	1,104,598	1,676,787	4,095,369
July 2018 - actual	74,109,473	1,918,193	1,509,942	2,023,559	5,451,694
August 2018 - actual	79,557,480	1,778,046	1,439,863	2,230,098	5,448,007
September 2018 - actual	78,314,056	(314,858)	(317,868)	(610,698)	(1,243,424)
_2, _3/ October 2018 - actual	82,454,493	1,429,090	1,306,714	1,404,633	4,140,437
_2/ November 2018 - actual	84,389,411	569,756	493,825	871,337	1,934,918
December 2018 - actual	88,123,264	1,360,141	913,578	1,460,134	3,733,853
_3/ January 2019 - actual	88,266,730	74,036	35,086	34,344	143,466
February 2019 - actual	93,039,011	1,645,342	1,177,747	1,949,192	4,772,281
March 2019 - actual	91,131,763	(565,660)	(496,983)	(844,605)	(1,907,248)
April 2019 - actual	87,146,255	(1,034,478)	(1,048,872)	(1,902,158)	(3,985,508)
May 2019 - actual	87,176,757	34,404	6,547	(10,449)	30,502
June 2019 - actual	83,215,417	(1,219,800)	(1,055,550)	(1,685,990)	(3,961,340)

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
June 2019

Line No.

Year 2018-2019

Cumulative (over) / under recovery - BASE FUEL CAPACITY

	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Beginning Balance	(910,631)				
June 2018 - actual	(1,231,472)	(168,835)	(109,798)	(42,208)	(320,841)
July 2018 - actual	(705,685)	97,201	127,214	301,372	525,787
August 2018 - actual	(167,087)	148,770	144,110	245,718	538,598
September 2018 - actual	(447,925)	(122,234)	(59,118)	(99,486)	(280,838)
_/2, _/3 October 2018 - actual	(768,992)	(155,607)	(165,705)	245	(321,067)
_/2 November 2018 - actual	(1,316,322)	(92,070)	(155,477)	(299,783)	(547,330)
December 2018 - actual	(2,417,453)	(465,350)	(270,393)	(365,388)	(1,101,131)
January 2019 - actual	(3,301,777)	(276,593)	(266,449)	(341,282)	(884,324)
February 2019 - actual	(4,252,925)	(255,719)	(273,449)	(421,980)	(951,148)
March 2019 - actual	(5,223,777)	(242,726)	(298,361)	(429,765)	(970,852)
April 2019 - actual	(5,894,084)	(11,486)	(238,213)	(420,608)	(670,307)
May 2019 - actual	(6,283,595)	146,654	(199,901)	(336,264)	(389,511)
June 2019 - actual	(6,766,248)	46,028	(204,425)	(324,256)	(482,653)

Year 2018-2019

Cumulative (over) / under recovery - ENVIRONMENTAL

	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Beginning Balance	(1,461,871)				
June 2018 - actual	(1,205,987)	146,842	32,175	76,867	255,884
July 2018 - actual	(1,154,405)	48,770	(30,136)	32,948	51,582
August 2018 - actual	(1,205,110)	23,971	(50,943)	(23,733)	(50,705)
September 2018 - actual	(1,388,163)	126	(79,741)	(103,438)	(183,053)
_/2 October 2018 - actual	(1,458,759)	(2,312)	(60,262)	(8,022)	(70,596)
_/2 November 2018 - actual	(1,348,880)	80,334	29,032	513	109,879
December 2018 - actual	(1,291,265)	38,565	18,548	502	57,615
January 2019 - actual	(1,191,028)	101,872	10,400	(12,035)	100,237
February 2019 - actual	(1,312,637)	(3,068)	(40,317)	(78,224)	(121,609)
March 2019 - actual	(1,223,735)	105,076	7,752	(23,926)	88,902
April 2019 - actual	(1,144,962)	111,893	4,409	(37,529)	78,773
May 2019 - actual	(965,535)	166,717	23,363	(10,653)	179,427
June 2019 - actual	(672,086)	219,527	52,209	21,713	293,449

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
June 2019

Line No.

Year 2018-2019					
Cumulative (over) / under recovery - DERP AVOIDED COSTS					
	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Beginning Balance	(24,303)				
June 2018 - actual	(13,251)	9,165	2,683	(796)	11,052
July 2018 - actual	(879)	10,304	2,796	(728)	12,372
August 2018 - actual	10,664	9,627	2,710	(794)	11,543
September 2018 - actual	23,085	10,480	3,062	(1,121)	12,421
_/2 October 2018 - actual	25,717	3,255	486	(1,109)	2,632
_/2 November 2018 - actual	18,004	(2,549)	(2,100)	(3,064)	(7,713)
December 2018 - actual	9,149	(3,757)	(2,216)	(2,882)	(8,855)
January 2019 - actual	237	(3,927)	(2,271)	(2,714)	(8,912)
February 2019 - actual	(4,097)	(1,327)	(1,142)	(1,865)	(4,334)
March 2019 - actual	(2,941)	1,614	65	(523)	1,156
April 2019 - actual	(614)	2,567	288	(528)	2,327
May 2019 - actual	(1,471)	990	(593)	(1,254)	(857)
June 2019 - actual	(2,092)	851	(443)	(1,029)	(621)

Year 2018-2019					
Cumulative (over) / under recovery - DERP INCREMENTAL COSTS					
	Cumulative	Residential	Commercial	Industrial	Total Company
_/1 Balance ending May 2018	(966,265)				
June 2018 - actual	(449,883)	289,414	95,385	131,583	516,382
July 2018 - actual	85,285	297,559	99,538	138,071	535,168
August 2018 - actual	643,476	306,707	106,165	145,319	558,191
September 2018 - actual	1,162,309	263,870	107,060	147,903	518,833
_/2 October 2018 - actual	1,458,476	111,032	26,537	158,598	296,167
_/2 November 2018 - actual	1,459,229	(86,182)	(63,094)	150,029	753
December 2018 - actual	1,471,614	(81,612)	(59,227)	153,224	12,385
January 2019 - actual	1,432,376	9,232	(115,256)	66,786	(39,238)
February 2019 - actual	1,344,867	(15,961)	(125,035)	53,487	(87,509)
March 2019 - actual	1,366,838	40,294	(99,958)	81,635	21,971
April 2019 - actual	(286,304)	(818,859)	(499,726)	(334,557)	(1,653,142)
May 2019 - actual	(474,031)	(67,487)	(150,947)	30,707	(187,727)
June 2019 - actual	(851,594)	(167,262)	(193,565)	(16,736)	(377,563)

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of over or under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts. Under collections, or regulatory assets, are shown as positive amounts.

_/1 May 2018 ending balance reflects adjustments pursuant to the docket no. 2018-3-E directive. The total adjustment of \$4,655 was made to the May ending balance

_/2 Reflects a prorated rate and prorated allocation factor for periods in which the approved rates changed.

_/3 Includes prior period adjustments.